Brain Injury Services
Respect, Learning, Independence

International Residential Assessment Instrument (interRAI), Community Health Assessment (CHA)

Summary of Results April 1, 2015 to March 31, 2016

Introduction

The interRAI CHA assessment system was developed in response to health providers' request for a modular instrument that could efficiently assess the well elderly individual and identify those people who merit further assessment to reduce risk, stabilize function, or minimise health decline. Information is collected across several domains which include functional performance, cognitive and mental health, social life, and general health and clinical issues. The assessment also draws responses across domains to generate Outcome Scales in a number of areas.

This fiscal year (April 1, 2015 – March 31, 2016), the agency completed 149 assessments, a comparable number to last year. The overwhelming majority, 96 percent of clients or their decision maker, agreed to have their assessments uploaded to the Integrated Assessment Record (IAR), again a similar number to last year. All residential clients completed the Core assessment module of the RAI CHA and then if prescribed, the Functional and the Mental Health Supplement was administered. Outreach Services' clients were first assessed using the Preliminary Screener tool and then if triggered, completed the more in-depth assessment modules. Applicants being admitted into Group Services only completed the Screener even when a more extensive investigation was suggested because the program's focus is socializing and participating in recreational pursuits.

The Screener was introduced to the agency in June 2012 and was created by the developers of the RAI to provide only the most essential information and quick assessment to inform the need for a more comprehensive investigation of the clients' service needs. This year the Screener was completed with 64 applicants and clients, or 43 percent of the time.

Clinical Assessment Protocols (CAPs)

CAPs are categorized in different domains and are triggered alerting the health care provider that further investigation and/or care planning would facilitate improvement, prevent decline, or reduce risk.

Change Over Time – Clients In Service

The graphs compares the percentage that each CAP was triggered for clients who have received service for at least one year and for whom an interRAI CHA assessment was completed; 70 assessments. The data excludes assessments completed with clients upon their admission to Brain Injury Services. It also excluded clients who only completed the Screener because it does not trigger CAPs. Again this year, Prevention of Illness and Further Disability, Cognitive Loss, and Mood were triggered most often.

2015 - 2016

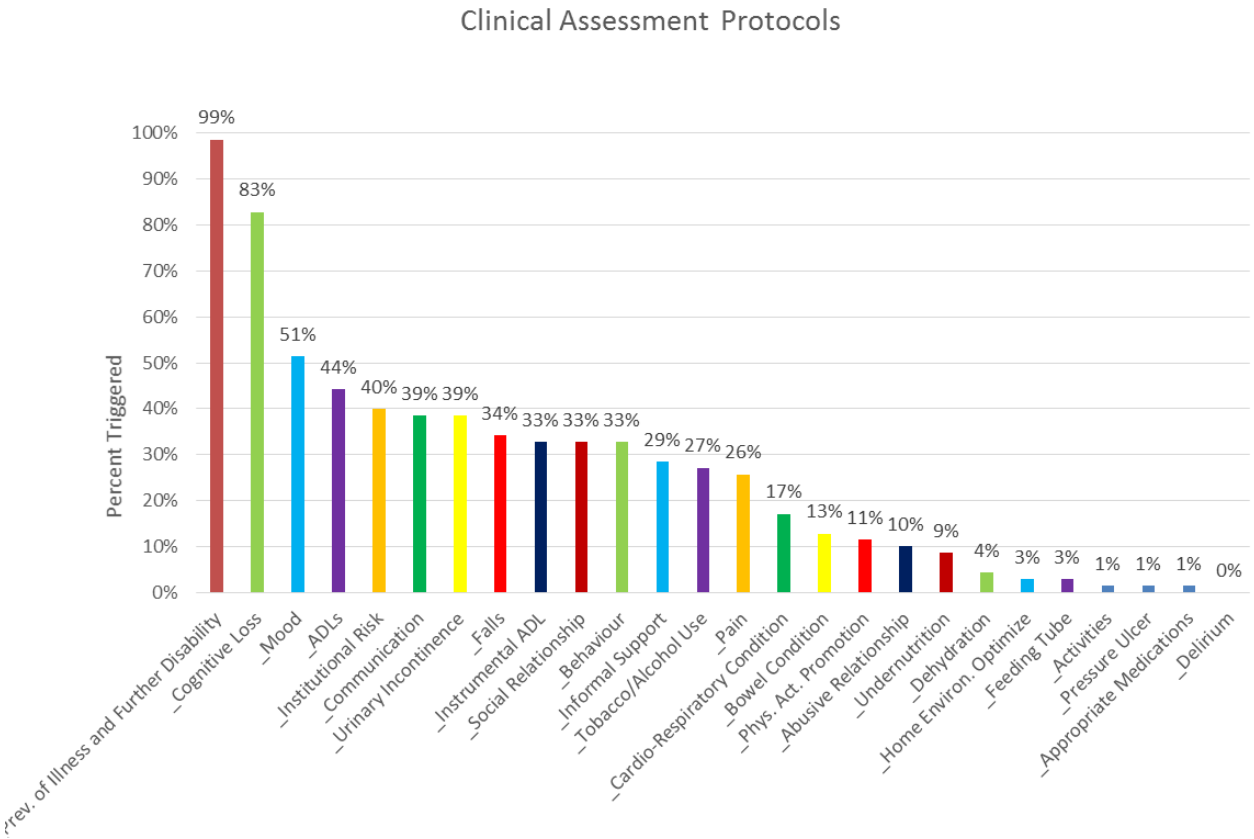

Figure 1: In descending order, the percentage that each CAP was triggered for clients how had been in service for at least one year; 70 interRAI CHA assessments.

The greatest positive changes over last year's aggregate data was seen in the Cardio Respiratory Condition CAP being triggered 13 percent less often and Urinary Incontinence being triggered seven percent less often. Increases were seen in Instrumental Activities of Daily Living (IADL), as it was triggered 10 percent more frequently, and Mood was triggered seven percent more often.

Domain - Functional Performance

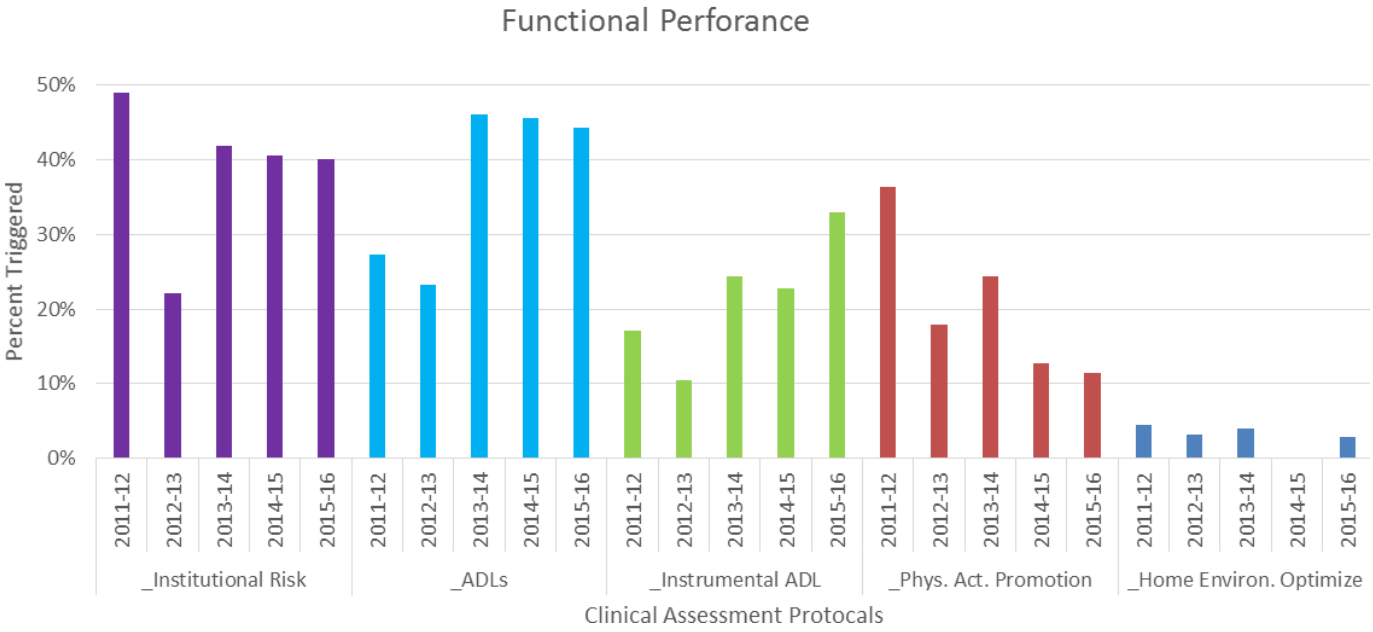

Figure 2: Clients have the potential to increase their performance in functional activities.

Functional Performance CAPs, with the exception of Institutional Risk, are triggered when the client or staff member believes there is the potential for improvement and that potential is supported by capabilities in other areas. Figure 2 shows that over the past five years, generally Brain Injury Services' clients are becoming more physically active, and have increased capacity and interest to complete IADLs more independently. The IADL CAP is triggered when there is cognitive capacity and the client/decision maker or the staff believes there can be improvements in the areas of: preparing meals, housework, shopping, and using public transportation, or there has been a change in function in the last 90 days.

In the past three years Institution Risk, ADLs, and Home Environment Optimization have been triggered at fairly consistent rates.

Institutional Risk has been triggered the most often in this domain of CAPs over the past five years. It has been triggered in 39 percent of all assessments completed. The CAP identifies clients who have deficits in physical functioning, memory, decision making, and health. The Activities of Daily Living (ADL) CAP was triggered often this year; 44 percent of the assessments completed. The CAP addresses a client's self-sufficiency in dressing, hygiene, walking, transferring, toileting, changing position in bed, and eating.

Domain – Cognition and Mental Health

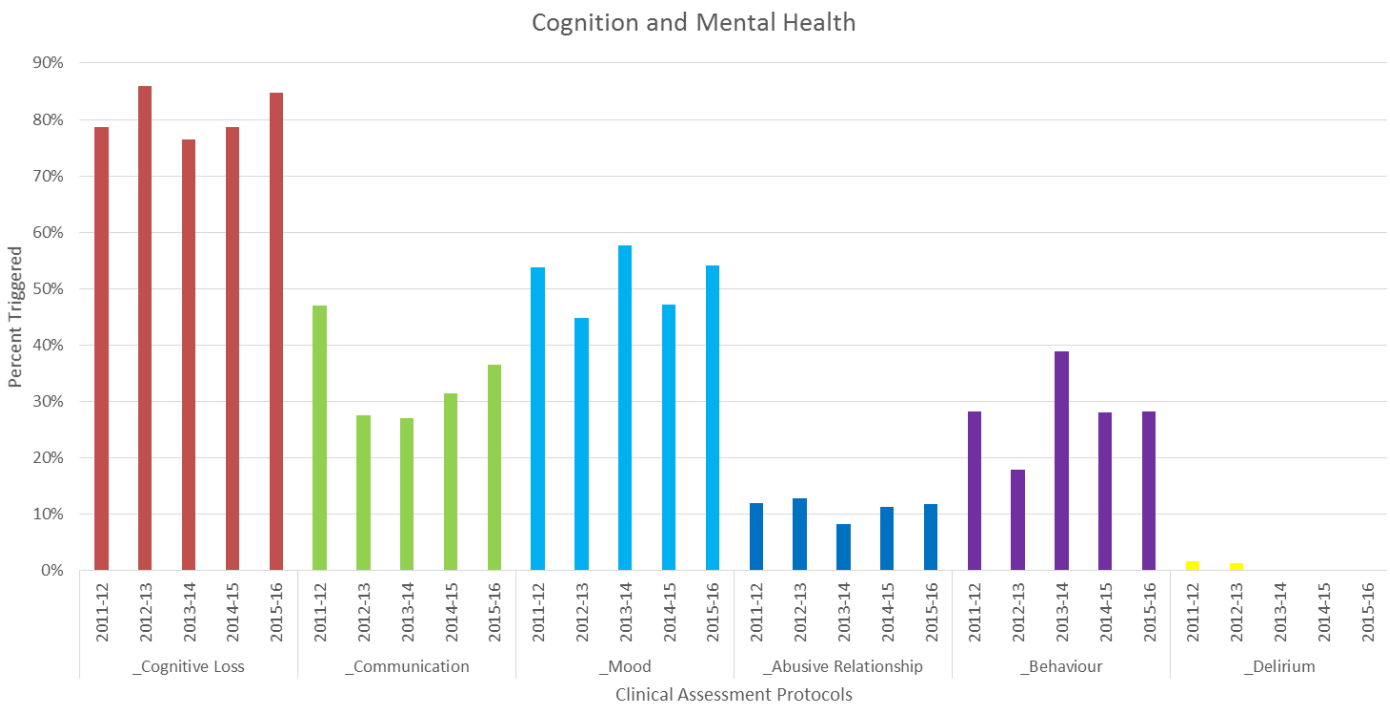

Figure 3: These CAPs are triggered when there is a potential concern.

Cognitive Loss is triggered for our clients because of their diagnosis of brain injury, limited short term memory recall, decision making, word finding difficulties, and/or behaviour. When the CAP was triggered it was to monitor the client for decline, not prevent decline. The interRAI CHA suggests medical interventions such as seeking a diagnosis for memory loss, having a medication review, investigating pain, and hydration to prevent further decline.

The Communication CAP is triggered for an increasing number of our clients in the past three years. The CAP can be triggered to “prevent decline” or for the “potential for improvement”. When there is potential for improvement the client has a moderate to severe communication shortfall and some ability to engage in everyday decision making. When triggered to prevent decline, in addition to a communication shortfalls, the client has better baseline communication skills and poorer everyday decision making capabilities. The agency’s database, nor aggregate data from Point Click Care or the Integrated Assessment Record (IAR) can identify if the majority of clients are trigging communication to prevent decline or there is a potential for improvement.

Mood was triggered in 54 percent of the assessments completed this year. Over the past five years it has generally been triggered 50 percent of the time, with a low in 2012/13 of 45 percent and a high in 2013/14 of 58 percent. Mood is trigged from the Core Assessment. It includes the following items: negative

statements, persistent anger with self or others, expressions, including nonverbal, of what appear to be unrealistic fears, repetitive health complaints, repetitive anxious complaints/concerns (non-health related), sad, pained, or worried facial expressions, and crying/tearfulness.

The frequency that the Behaviour CAP is triggered has remained constant in the past two years at 28 percent of the time, and is trigged by the Functional Assessment. It includes: wandering, verbal abuse, physical abuse, socially inappropriate or disruptive behaviour, inappropriate public sexual behaviour or public disrobing, and resists care.

Domain – Social Life

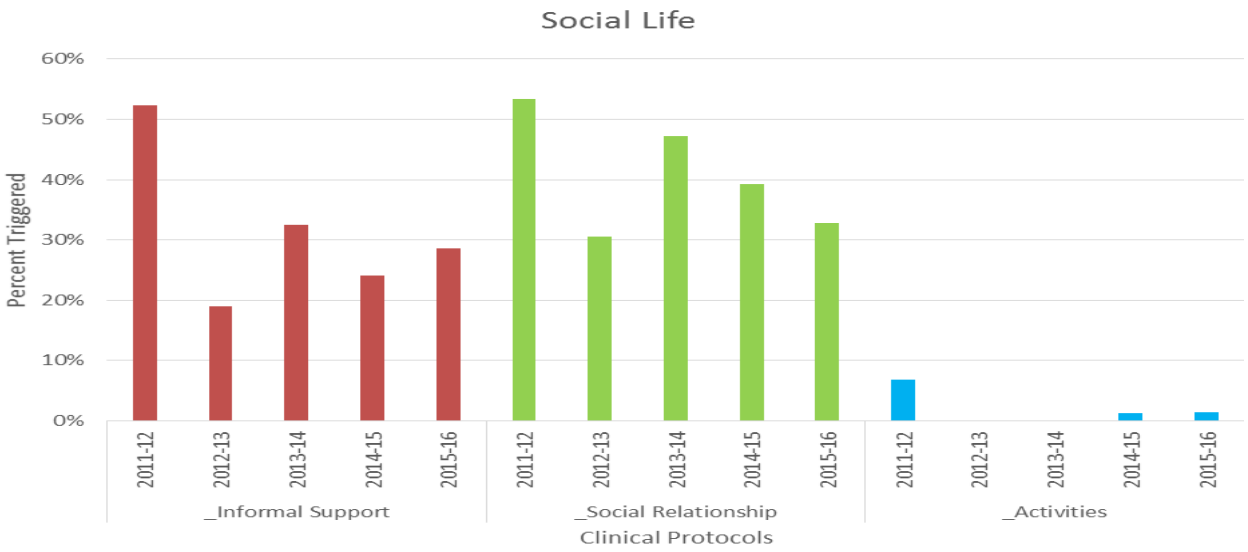

Figure 4: These CAPs are triggered when there is a potential concern.

The Informal Support CAP looks to situations where a client needs the help of others and usually exceeds the response capabilities of family and friends. Items for this CAP includes: the client's living arrangement, length of time alone during the day, not having an unpaid helper, and ability to prepare meals, do housework, shop, and use transportation. The graph does not show a trend over the past five years. It was triggered in 29 percent of the assessments this year.

The Social Relationships CAP includes communication skills, memory/recall, a change in the client's social activities, the length of time the client is alone during the day and asks the client if they feel lonely. This CAP was triggered in 33 percent of the assessments completed this year; all clients reported feeling lonely. On a positive note, the trend over the past three years is that the CAP is being triggered less often.

The Social Activities CAP identifies clients who have cognitive reserves who have either withdrawn from activities or who are uneasy to participate in leisure activities or social relationships. It was only triggered in one assessment this year; client 00229.

Domain – Clinical Issues

For easy of viewing the CAPs under in the Clinical Issues domain they have been divided into two graphs.

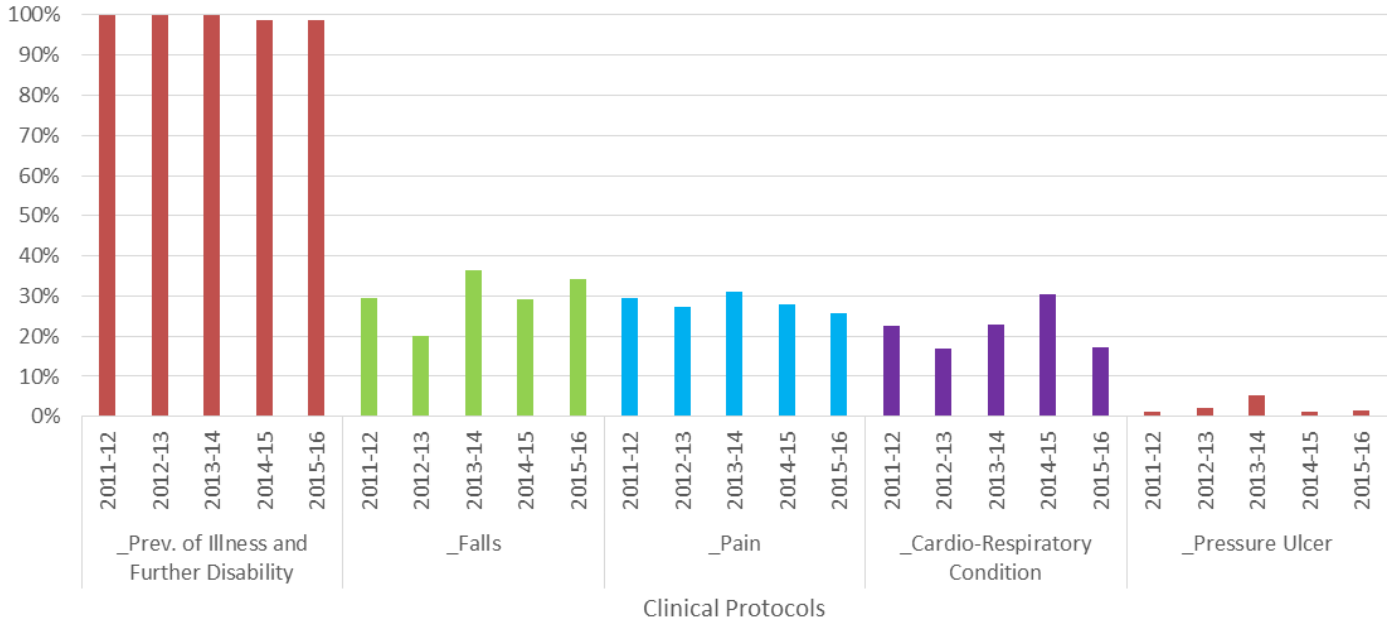

Figure 5: Percentage of assessments that triggered the following CAPs: Prevention of Illness and Further Disability, Falls, Pain, Cardio-Respiratory Condition and Pressure Ulcers are represented.

The frequency that all five of these CAPs are triggered has remained consistent over the past five years. Aggregate data shows that Falls and Pain has been triggered 32 percent and 34 percent of the assessments in the past five years. Pain is investigated by considering the frequency with which a client complains or shows evidence of pain and the intensity of highest level of pain present. Cardio-Respiratory Condition was triggered in 30 percent of assessments done last year and 17 percent in 2015/16, a 13 percent decline. Items considered for this CAP are: dizziness, chest pain, and shortness of breath. Prevention of Illness and Further Disability was triggered in 99 percent of the assessments completed this year. This CAP is typically triggered because the client has not had a colonoscopy in the last five years and never had the pneumovax vaccine.

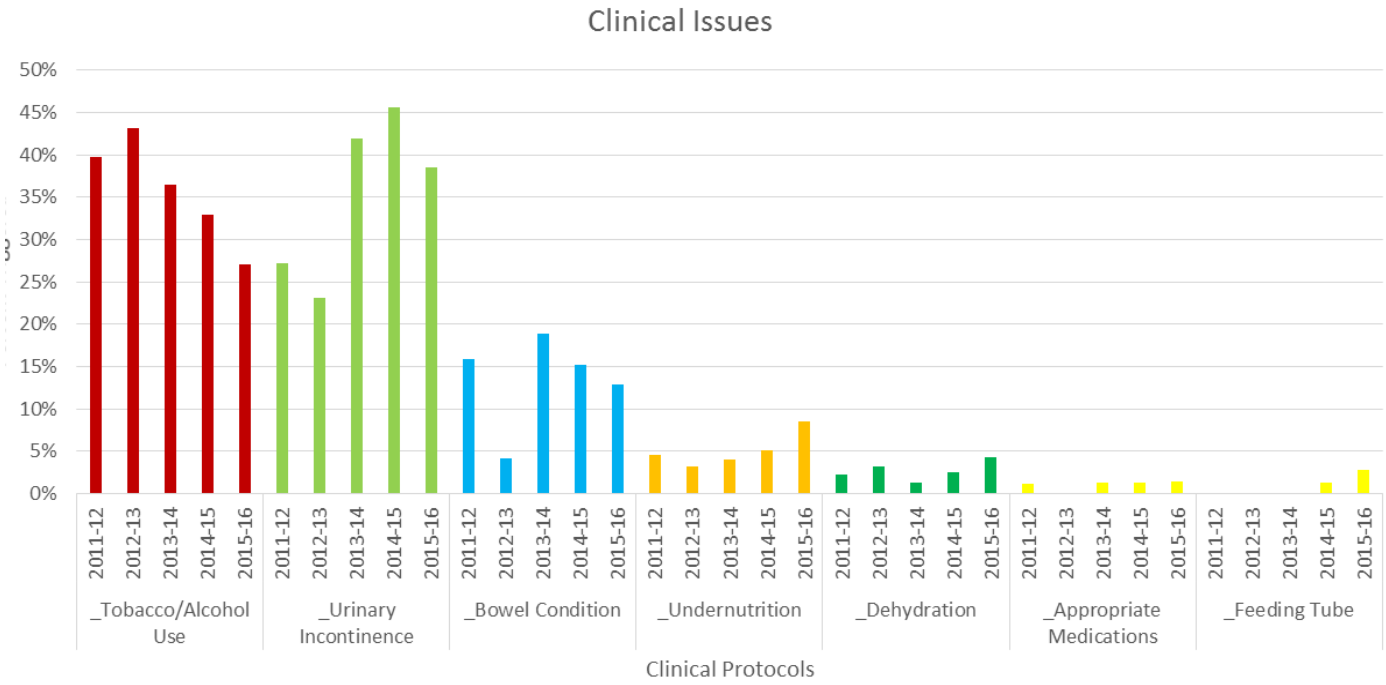

Figure 6: Percentage of assessments that the following CAPs were triggered: Tobacco and Alcohol Use, Urinary Incontinence, Bowel Conditions, Under-nutrition, Dehydration, Appropriate Medications and Feeding Tube.

Over that past five years there is a trend of fewer clients smoking tobacco daily and/or consuming less alcohol in a single sitting. This year 27 percent of assessments triggered the CAP verses 33 percent last year. Urinary Incontinence was triggered in 39 percent of assessments this year; seven percent decline over last year. Urinary Incontinence includes: ability to make daily decisions, walking, change in ADLs in the last 90 days, bladder incontinence, hip fracture, pneumonia, and diarrhea. Bowel Incontinence was triggered 13 percent of the time. The assessment's recommendation to alleviate both concerns is scheduled toileting.

In the past four years Under-nutrition has been triggered between three and five percent. This year the frequency doubled to it being triggered in nine percent of assessments. Each time this CAP was triggered the manager and director of the service were notified by email to highlight the concern. In all cases it was reported that the client's physician was aware of the concern and it was being or had been investigated. Dehydration was a concern in four percent of assessments. Clients typically identified that they did not prefer to drink fluids, not that they could not. Each client was made aware of the risks and encouraged to drink liquids.

Clients Upon Admission

2015/16

Prior to being admitted to Outreach Services the Screener tool, and if triggered, the interRAI CHA was completed for both Local Health Integrated Network (LHIN) funded and fee for service clients. For clients being admitted to a residential service, the interRAI CHA was always completed. Applicants entering Group Services only completed the Screener tool.

Assessors from the Admissions Department and Rehabilitative Services completed 35 assessments. Assessments were completed. Twenty Screeners were done and 15 interRAI CHA assessments, five of those triggered the need for the Mental Health Supplement. All but two people agreed to have their assessment uploaded to the IAR.

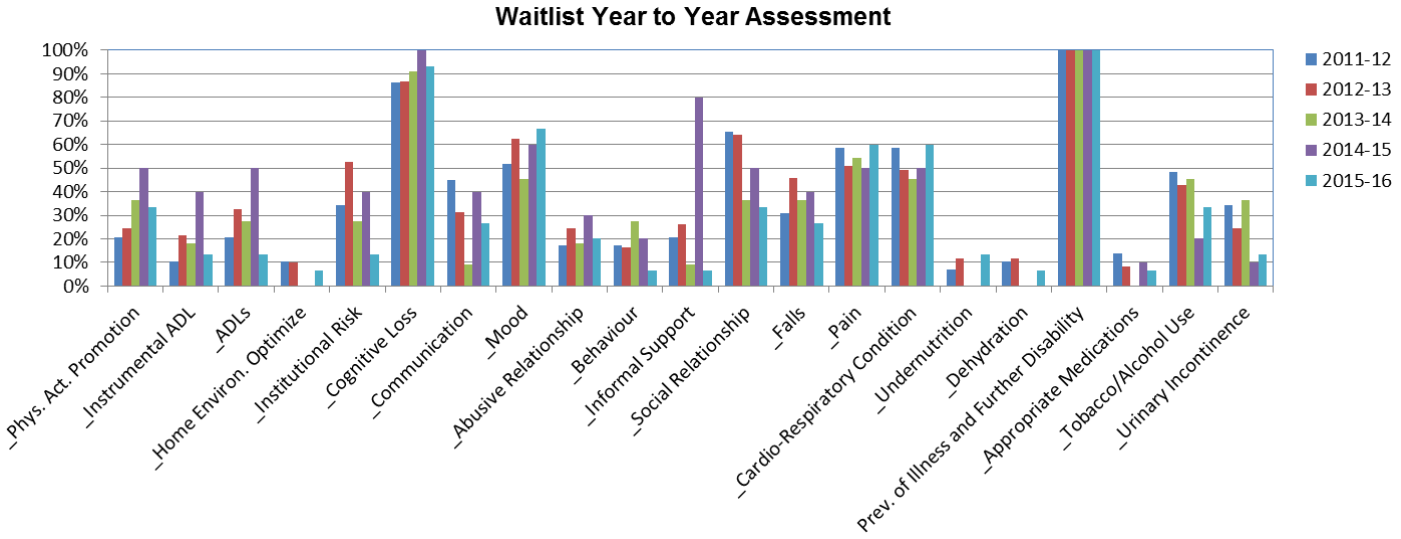

Figure 15

Comparison Between Clients Upon Admission to Client Population Receiving Service

The graph below compares the CAPs triggered for 126 clients who completed the interRAI CHA assessment upon their admission to service in the past five years, with 406 assessments completed with clients who have been in service for at least a year.

The most profound differences between the two groups are in the following CAPs: Social Relationships, Pain, and Cardio-Respiratory Condition. Examining each CAP more closely, 57 percent of clients upon entry into service state they are lonely; however, have the capacity to sustain a social relationship as measured by the interRAI CHA. Fifty-four percent of clients upon admission report having daily pain or pain that is not well controlled, compared to 28 percent of clients receiving service. Upon admission, 52 percent of the clients report dizziness, chest pain, and shortness of breath, compared to 22 percent of clients receiving service. Upon further investigation, the far majority of clients being admitted report their breathing difficulties were related to anxiety and worry.

IADL, ADLs, Communication, Behaviour, Informal Supports, Urinary Incontinence, and Bowel Condition are CAPs that are triggered slightly more frequently for clients in service. This trend is likely due to the agency's expertise in serving clients with complex and behavioural challenges.

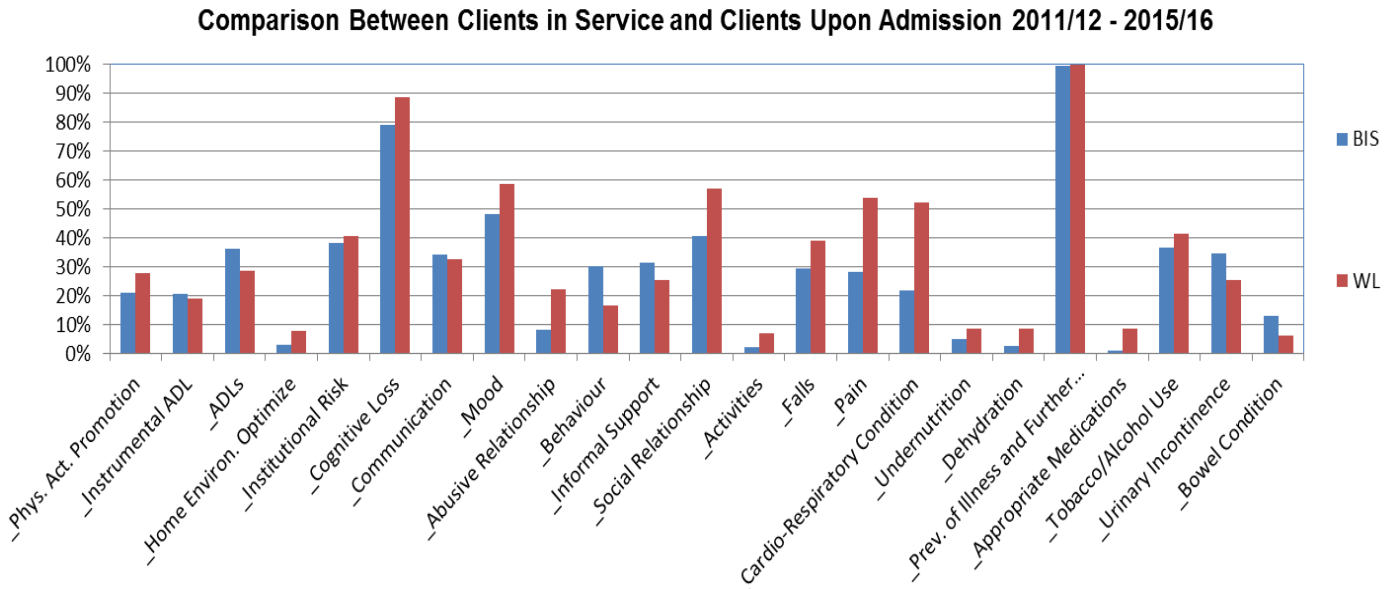

Figure 16

Outcome Scales

Outcome Scales measured by the interRAI CHA have remained consistent over the past five years for clients receiving service. The clients that the agency services have a high dependence on others when performing: meal preparation, ordinary housework, managing finances, managing medications, telephone use, shopping, and for transportation.

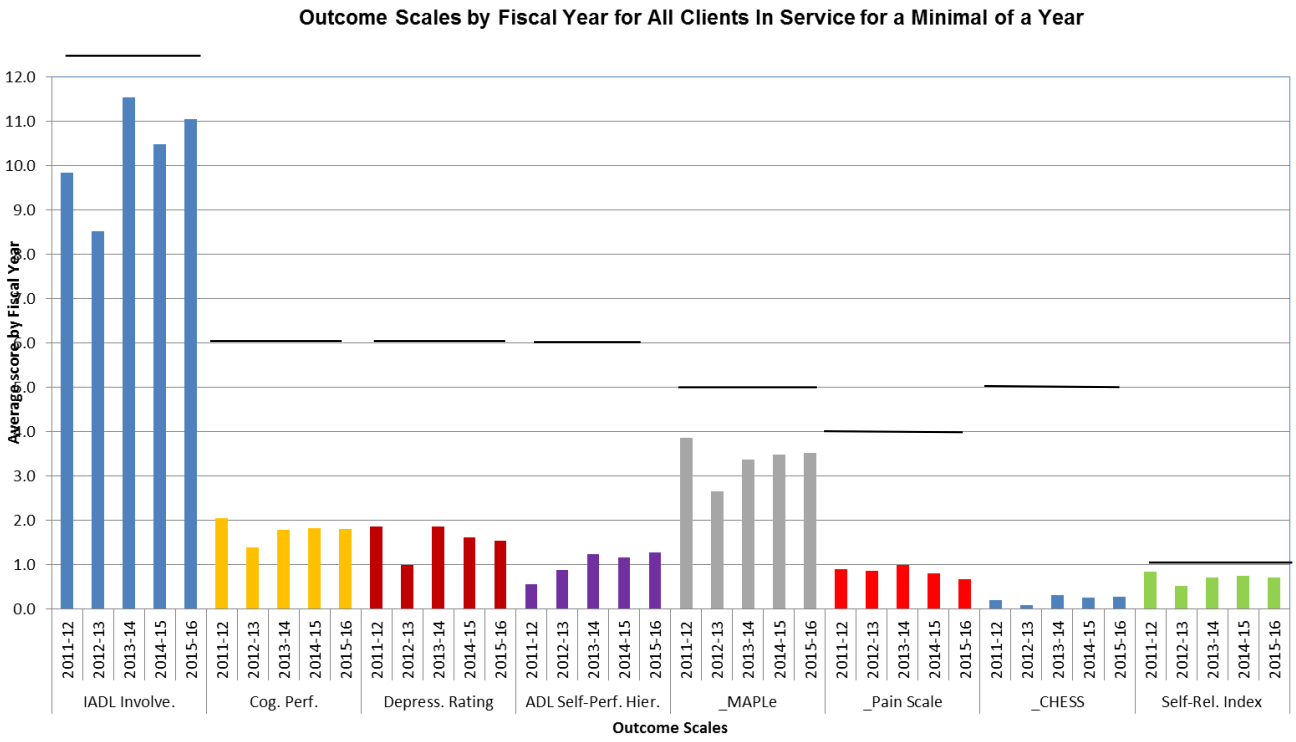

Figure 17: The average score for each Outcome Scale by fiscal year. The black line notes the maximum rating for the scale. A higher score correspondence to a greater degree of impairment.

Average Instrumental Activities of Daily Living Involvement Scale

This scale is based upon a sum of all seven self-performance IADL items: meal preparation, ordinary housework, managing finances, managing medications, telephone use, shopping, and transportation. Higher scores indicate greater dependence on others in performing instrumental activities of daily living. The agency's average was in the Extensive Assistance Required range (8-14) again this year.

Average Cognitive Performance Scale

Scores are based on skills for daily decision-making, making self-understood and short-term memory recall. Higher scores indicate a greater degree of cognitive impairment. The average for the clients served by the agency was assessed to be in the Mild Impairment range (2) again this year.

Average Depression Rate Scale
The scale is based on seven items: negative statements, persistent anger, expressions of unrealistic fears, repetitive health complaints, repetitive anxious complaints, sad or worried facial expression, and tearfulness. The agency's average rating was in the Some Symptoms and Intervention May Be Helpful range (1-2); the same as last year. Interesting to note that all services were within the Some Symptoms and Intervention May Be Helpful range this year.

Average ADL Self-Performance Hierarchy Scale
The ADL Hierarchy Scale is a measure of performance based on eating, locomotion, toilet use and personal hygiene. The agency average was in the Supervision Required range (1), the same as years past.

Average Method of Assigning Priority Levels (MAPLe)
The MAPLe is used to categorize clients into five levels of risk for adverse outcomes. It is a decision-support tool that may be used to inform choices related to allocation of home care resources and prioritization of clients needing community or facility-based services. The average for clients served by the agency is in the Moderate (3) to High (4) range.

When investigating more thoroughly this years findings, the agency serviced clients ranging from a High MAPLe score of five at CWP to a low score of one at the TLS.

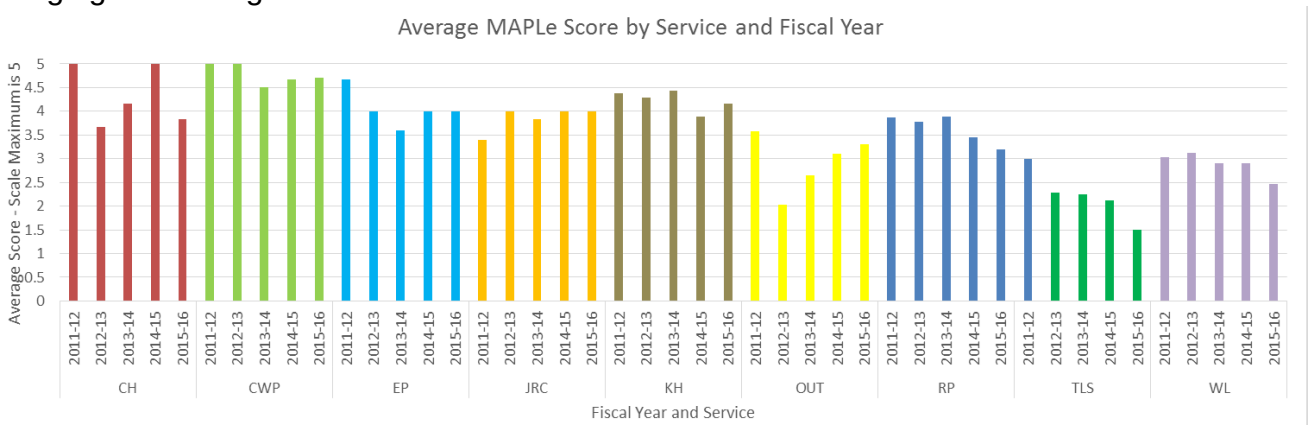

Figure 18: MAPLe score by service.

Average Pain Scale
Scores are based on two questions: pain frequency and pain intensity. The agency's average was in the Less Than Daily Pain range (1). This is the same range as years past.

Average Change in Health End-Stage Disease and Sighs and Symptoms (CHESS)
The CHESS measures medical complexity and health instability. It is based on: vomiting, dehydration, weight loss, shortness of breath, enema, end-stage disease, and decline in cognition and ADL). Higher scores indicate higher levels of medical

complexity. The average for clients in the agency fell in the Stable range (0), no change from previous years.

Average Self-Reliance Index
The scale categorizes clients as being either Self-Reliant or Impaired. Self-Reliance is based on being independent or requiring set-up help only for bathing, personal hygiene and walking, and being independent in cognitive skills for daily decision making. The agency's average score was 0.8, placing in the Impaired range (1).

Mental Health Supplement

The Mental Health Supplement is triggered when the client has a Cognitive Performance Scale between Intact and Mild Impairment and one of the following: Schizophrenia, abnormal thought process, delusions, five or more alcoholic drinks daily or symptoms of depression. The supplement gives a summary of the mental health symptoms the client is experiencing. It does not measure the symptoms. The supplement was triggered 19% of the time this year for client receiving service, similar to the frequency the agency has seen in the past.

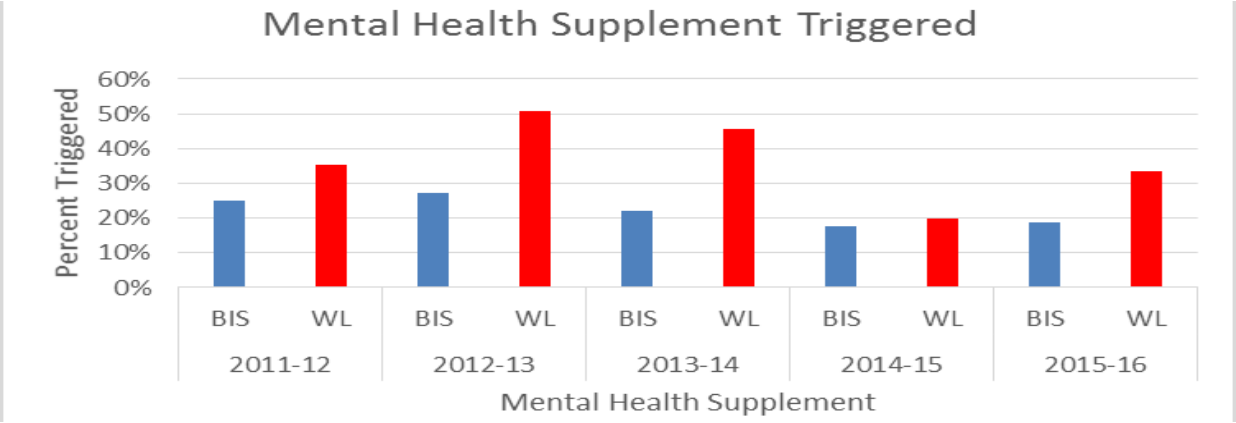

Figure 19: This fiscal (2015/16) there were 114 assessment completed with clients receiving service. 35 assessments completed with clients starting service; referred to in the graph as WL.